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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/671,587

09/29/2003

Takeshi Wada

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OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

RENNER, CRAIG A

ART UNIT

PAPER NUMBER

2627

NOTIFICATION DATE

DELIVERY MODE

05/11/2007

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/671,587	Applicant(s) WADA ET AL.	
	Examiner Craig A. Renner	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 4,7-13,17,20-26,30 and 33-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,14-16,18,19,27-29,31,32 and 40-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 4, 7-13, 17, 20-26, 30 and 33-39 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to one or more non-elected inventions/species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07 April 2006.

Drawings

2. The drawings were received on 22 February 2007. These drawings are accepted.

3. The drawings in total, however, are again objected to as failing to comply with 37 CFR 1.84(p)(5) because they include one or more reference signs not mentioned in the description. Note, for instance, " I_2 " (shown in Figs. 6a and 6b, for instance). Although reference sign " m_2I_2 " is disclosed as a "turning moment" in line 16 on page 16, for instance, and reference sign " m_2 ", per se, is disclosed as a "mass of the magnetic head slider" in lines 24-25 on page 15, for instance, reference sign " I_2 ", per se, has not been disclosed in the description.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) and/or an amendment to the specification in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended

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replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The following is suggested:

--SUSPENSION WITH INTEGRALLY FORMED LOAD BEAM
LOAD-GENERATION MEMBER--.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 5, 6, 14-16, 18, 19, 27-29, 31, 32 and 40-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Hatch et al. (US 5,657,187).

Hatch et al. (US 5,657,187) teaches a suspension comprising a resilient flexure (14, sometimes mislabeled 17) for supporting a head slider (12, sometimes mislabeled 16) having at least one head element (lines 60-62 in column 1, for instance) to control flying attitude of the head slider; a load beam (16), supporting the flexure at its top end section (as shown in FIGS. 2A and 5B, for instance), for applying a load in a direction perpendicular to a surface of a recording medium (11) to the head slider; at least one fixing means (includes adjacent 18, for instance, in at least an equivalent structural sense), formed integral with the load beam (as shown in FIGS. 2A and 5B, for instance), for fixing the load beam to a support arm (21); and a load-generation means (includes 26, for instance, in at least an equivalent structural sense), coupling the at least one fixing means with the load beam (as shown in FIGS. 2C and 5B, for instance), for generating the load, the load-generation means having a first at least one leaf spring section (26) formed in a three-dimensionally bent shape and integral with the load beam (as shown in FIGS. 2C and 5B, for instance), the first at least one leaf spring section being located at a rear of the at least one fixing means relative to the resilient flexure (as shown in FIGS. 2C and 5B, for instance, i.e., dependent upon viewer perspective) [as per claim 1]; wherein the suspension is a component of a head gimbal assembly comprising the head slider having the at least one head element (as shown in FIGS. 2C and 5B, for instance) [as per claim 2]; wherein the first at least one leaf spring section and the load beam are unitarily formed by a single plate member (as shown in FIGS. 2A and 5B, for instance) [as per claim 3]; wherein the first at least one leaf spring section is located at the rear of a center of an unsprung mass of the head gimbal assembly except

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for the head slider (as shown in FIGS. 2C and 5B, for instance, i.e., dependent upon viewer perspective) [as per claim 5]; wherein the first at least one leaf spring section is formed by a single leaf spring section (as shown in FIGS. 2C and 5B, for instance) [as per claim 6]; wherein the at least one head element comprises at least one thin-film magnetic head (lines 64-66 in column 1, for instance) [as per claim 14]; wherein the head gimbal assembly is a component of a head arm assembly further comprising the support arm fixed to the at least one fixing means at its top end section for supporting the load beam (as shown in FIGS. 1 and 5B, for instance); and a drive means (includes 24 and 26 as shown in FIG. 1, for instance, in at least an equivalent structural sense) for rotationally moving the support arm in a direction parallel to the surface of the recording medium [as per claims 15, 16, 18, 19 and 27]; wherein the first at least one leaf spring section is located at the front of a horizontal bearing axis (part of 22 as shown in FIG. 1, for instance) of the support arm (i.e., dependent upon viewer perspective), which is driven to rotationally move around the horizontal bearing axis [as per claims 28, 29, 31, 32 and 40]; and wherein the head arm assembly is a component of a disk drive device (10) comprising the recording medium (as shown in FIG. 1, for instance) [as per claims 41 and 42].

Response to Arguments

7. Applicant's arguments filed 22 February 2007 have been fully considered but they are not persuasive.

The applicant argues that "Hatch does not disclose at least the one leaf spring section located at a rear of at least one fixing means relative to the resilient flexure" (emphasis added by applicant). This argument, however, is not found to be persuasive as Hatch does disclose at least one leaf spring section (26) located at a rear of at least one fixing means (includes adjacent 18, for instance, in at least an equivalent structural sense) relative to a resilient flexure (14, sometimes mislabeled 17). That is, the at least one leaf spring section is located at the rear of the at least one fixing means relative to the resilient flexure being mounted in a rearward direction. Note that the language "relative to the resilient flexure" does not necessarily establish a specific location for the "rear".

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig A. Renner whose telephone number is (571) 272-7580. The examiner can normally be reached on Tuesday-Friday 9:00 AM - 7:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Craig A. Renner
Primary Examiner
Art Unit 2627

CAR